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10/687,864	10/17/2003	Carrie Delcomyn	1080	9573
26749	7590	12/20/2005	EXAMINER	
MONIKA J. HUSSELL 900 LEE STREET SUITE 600 CHARLESTON, WV 25301			DELCOTTO, GREGORY R	
			ART UNIT	PAPER NUMBER
			1751	

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/687,864

Applicant(s)

DELCOMYN ET AL.

Examiner

Gregory R. Del Cotto

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 24-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-24 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/17/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

1. Claims 1-28 are pending.

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-23, drawn to a water-based composition containing monopersulfates, buffers and ketones, classified in class 510, subclass 372.
- II. Claims 24-28, drawn to a method for preparing a composition containing monopersulfates, buffers and ketones, classified in class 510, subclass 505.

The inventions are distinct, each from the other because of the following reasons:

Inventions of Group I and Group II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the composition of Group I can be made by a materially different process such as by mixing all of the ingredients simultaneously.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Monika Hussell on December 8, 2005, a provisional election was made with traverse to prosecute the invention of Group I, claims 1-23. Affirmation of this election must be made by applicant in replying to this Office action. Claims 24-27 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms "carbonate-type" and "water-based" in claims 1, 8, 15, and 16 are relative terms which render the claim indefinite. The terms "carbonate-type" and "water-based" are not defined by the claim, the specification does not provide a standard for

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ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The specification provides no guidance to one of ordinary skill in the art as to what is meant by the terminology "carbonate-type" and "water-based" as recited the instant claims. In the absence of such guidance or a definition, it would not be clear to one of ordinary skill in the art as to what compounds fall within and outside the scope of "carbonate-type" and what compositions fall within and outside the scope of "water-based" compositions. Thus, one of ordinary skill in the art could not determine the metes and bounds of the claimed invention. For example would compositions containing 30%, 20%, 15% water, etc., fall within the scope of water-based as recited by the instant claims. Note that, the addition of the word "type" to an otherwise definite expression extends the scope of the expression so as to render it indefinite. Ex parte Copenhaver, 109 USPQ 18 (Bd. App.) 1955. See MPEP 2173.05(c). Note that, claims 2-7, 9-14, and 17-23 have also been rejected due to their dependence upon claims 1, 8, 15, and 16.

With respect to claims 11 and 20, these claims are vague and indefinite in that they recite the trademark "Triton-X" which is not permissible claim language. Note that, if the trademark or tradename is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 USC 112, second paragraph.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 5-9, 10, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Heffner et al (US 5,437,686).

Heffner teaches bleaching compositions containing an inorganic peroxygen compound and a bicyclic or tricyclic diketone as an activator for the peroxygen compound. The composition preferably comprises about 1 to about 75% of the peroxygen bleaching compound and about 1 to about 75% of the bicyclic or tricyclic diketone bleaching compound activator. The compositions can be formulated as dry concentrated, aqueous solutions, aqueous solutions containing non-aqueous solvents,

etc. Note that, the Examiner asserts that aqueous solutions containing non-aqueous solvents would meet the limitation of "water-based" as recited by the instant claims. The compositions are environmentally safe, effective as bleaching agents from below room temperature to higher temperatures, biodegradable and otherwise highly desirable. See Abstract. Highly preferred peroxygen salts include sodium and potassium monopersulfates, etc. See column 3, lines 50-69. Preferred ketones for use as a bleach activator include decalin-1, 5-dione, methyl-decalin-1, 6-dione, etc. See column 5, lines 40-60. The bleach activator process is carried out in aqueous solution having a pH of from about 7 to about 12. Since an aqueous solution of the persalts or peracids is generally acidic, it is necessary to maintain the requisite pH conditions by utilizing a buffering agent such as sodium bicarbonate, sodium carbonate, etc. which are the same as the "carbonate-type" buffers as recited by the instant claims. These buffers are used in amounts from 1 to about 85% by weight of the bleaching compositions. See column 8, lines 25-45. Suitable surfactants include nonionic surfactants such as ethoxylated alcohols wherein the alkanol has 9 to 18 carbon atoms and wherein the number of moles of ethylene oxide is from 3 to 15. See column 8, line 50 to column 9, line 20. Other suitable surfactants include anionic surfactants, amine oxides, etc. See column 11, line 55 to column 12, line 40.

Nonaqueous liquid carriers can also be used in the compositions and include propylene glycol, polyethylene glycol, etc. See column 14, lines 55-69. Heffner et al disclose the claimed invention with sufficient specificity to constitute anticipation.



Accordingly, the teachings of Heffner et al anticipate the material limitations of the instant claims.

Claims 1-10 and 12-19 are rejected under 35 U.S.C. 102(b) as being anticipated by King (US 4,485,028).

King teaches a stable, cleaning solution for acoustic materials and the like, such as porous tile, fabric, etc., is disclosed that contains an inorganic oxidizer of ammonium persulfate as the active ingredient in the solution, that may be applied by spraying. Potable tap water is used as the diluent. The composition has a pH of about 8 to 9. See Abstract. Additionally a soil suspending agent may be used such as alkali metal phosphates, alkali metal carbonates, etc., in amounts from 0.1 to 4% by weight. Surfactants such as ethoxylated alcohols, alky ether sulfates, cationic surfactants, etc., may also be used in amounts from 0.5 to 4% by weight. Also, water miscible solvents may be used including isopropyl alcohol, ethyl alcohol, ethyl and butyl monoesters of ethylene glycol, methyl ethyl ketone, acetone, etc., in amounts from 1 to 6% by weight.

Specifically, King teaches compositions containing alkali persulphate, 0.3% sodium metasilicate, 0.02% sodium CMC, 0.05% tetrasodium EDTA, 0.4% sodium xylene sulfonate, 0.4% phosphate ester, 0.2% ethoxylated alkyl phenol, 0.2% sodium fatty acid, 1% isopropyl alcohol,, 1% acetone, and the balance water. See column 4, line 30 to column 5, line 20. King discloses the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the teachings of King anticipate the material limitations of the instant claims.

Claims 1-4 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al (US 5,366,593).

Lee et al teach chemical pulp that contains reactants able to generate a dioxirane within the pulp. The oxidation process is made up of the following steps: The reactants comprise a carbonyl compound such as acetone and an oxygen donor such as monoperoxysulfate. The reaction is carried out at a pH of 6.5 to 8 which is achieved by the addition sodium bicarbonate. See column 4, line 20 to column 5, line 40. Lee et al disclose the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the teachings of Lee et al anticipate the material limitations of the instant claims.

Claims 11 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over King (US 4,485,028) as applied to claims 1-10 and 12-19 above, and further in view of Kramer et al (US 4,850,729) and Colodney et al (US 4,576,738).

King is relied upon as set forth above. However, King does not teach a composition containing a Triton-X surfactant and a solvent such as propylene glycol in addition to the other requisite components of the composition as recited by the instant claims.

Kramer et al teach a decontaminating composition and delivery system. The decontaminating composition is prepared by combining a "per-salt, an activator for hydrogen peroxide which effects free radical formation, both of which are in dry form, and an aqueous solution comprised of a nonvolatile alcohol and a surfactant active agent. See Abstract. The preferred liquid component of the decontaminating

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composition is an aqueous solution containing 15 percent by volume of a nonvolatile alcohol and 0.2 percent by weight of the surfactant ethoxylated octyl-phenol under the tradename Triton X-100. See column 8, lines 1-61.

Colodney et al teach a hard surface cleaning composition containing a binary solvent system comprising a saturated terpene hydrocarbon and a non-aqueous polar solvent in combination with surfactants and builder salts. The binary system provides synergistic cleaning action for removal of greasy soil from porous and non-porous hard surfaces. See Abstract. Additionally, the compositions may contain up to about 2% by weight of an organic solvent such as ethanol, ethylene glycol, or propylene glycol. See column 6, lines 50-69.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a Triton-X surfactant in the composition taught by King, with a reasonable expectation of success, because Kramer et al teach the use of a Triton-X surfactant which is an ethoxylated octyl phenol surfactant and further, King teaches the use of ethoxylated alkyl phenol surfactants in general.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use propylene glycol in the composition taught by king, with a reasonable expectation of success, because Colodney et al teach the equivalence of propylene glycol to ethanol in a similar cleaning composition and further, King teaches the use of ethanol.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a Triton-X surfactant in the composition taught by King, with

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a reasonable expectation of success, because Kramer et al teach the use of a Triton-X surfactant which is an ethoxylated octyl phenol surfactant and further, King teaches the use of ethoxylated alkyl phenol surfactants in general.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition containing a Triton-X surfactant and a solvent such as propylene glycol in addition to the other requisite components of the composition as recited by the instant claims, with a reasonable expectation of success, because King in combination with Kramer et al and Colodney et al suggest a composition containing a Triton-X surfactant and a solvent such as propylene glycol in addition to the other requisite components of the composition as recited by the instant claims.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8-27 and 34-40

of copending Application No. 10/693194. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 8-27 and 34-40 of 10/693194 encompass the material limitations of the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition containing a monopersulfate compound, a carbonate-type buffer, ketone, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success, because claims 8-27 and 34-40 suggest a composition containing a monopersulfate compound, a carbonate-type buffer, ketone, and the other requisite components of the composition in the specific proportions as recited by the instant claims. Note that, a dioxirane compound as recited by claims 8-27 and 34-40 of 10/693194 would suggest a composition containing a persulfate and ketone such as acetone since dioxiranes form from combining a persulfate and ketone such as acetone.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***


2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.

Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Gregory R. Del Cotto  
Primary Examiner  
Art Unit 1751

GRD  
December 9, 2005